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FORM**

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Total Number of Pages in This Submission

Application Number	09/458,882
Filing Date	December 10, 1999
First Named Inventor	Mikio Mizutani et al.
Art Unit	2626
Examiner Name	Mark E. Wallerson
Attorney Docket No.	MAT-4351US1

ENCLOSURES (Check all that apply)

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Firm Name	ReinerPrestia
Signature	
Printed Name	Lawrence E. Ashery
Date	November 3, 2005

Registration No. 34,515

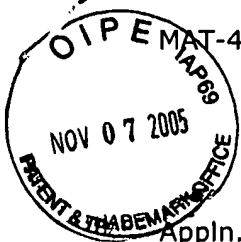
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PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appln. No: 09/458,882
Applicants: Mikio MIZUTANI, et al.
Filed: December 10, 1999
Title: MODULATOR AND DEMODULATOR (MODEM)
TC/A.U.: 2626
Examiner: Mark E. Wallerson
Confirmation No.: 9396
Docket No.: MAT-4351US1

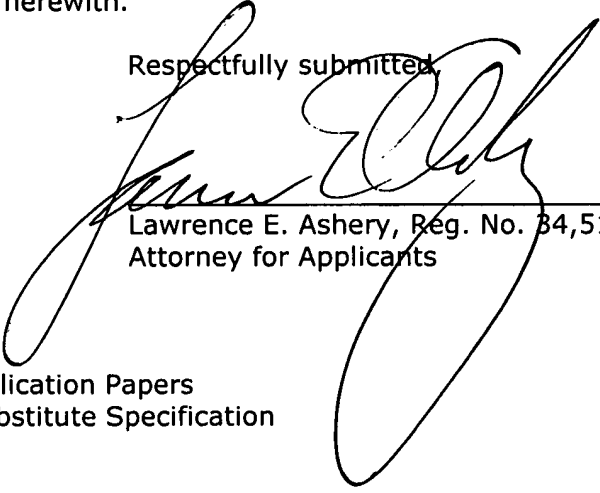
RESPONSE TO NOTICE TO FILE CORRECTED APPLICATION PAPERS

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Alexandria, VA 22313-1450

Sir:

Applicants respectfully request that the Examiner accept the enclosed replacement page of the substitute specification submitted herewith.

Respectfully submitted,


Lawrence E. Ashery, Reg. No. 34,515
Attorney for Applicants

LEA/ds

Enclosures: Notice to File Corrected Application Papers
Replacement Page 15 of Substitute Specification

Dated: November 3, 2005

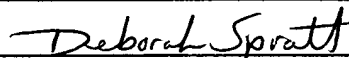
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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/458,882	12/10/1999	MIKIO MIZUTANI	MAT-4351US1	9396

7590 10/28/2005

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RECEIVED OCT 31 2005 RatnerPrestia	EXAMINER
	WALLERSON, MARK E
	ART UNIT 2626
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DATE MAILED: 10/28/2005	

RSPD₁ (30 DAYS) 11-27-05

11

Please find below and/or attached an Office communication concerning this application or proceeding.



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Serial Number
09458882

Date Mailed
10/28/05

NOTICE TO FILE CORRECTED APPLICATION PAPERS

Notice of Allowance Mailed

This application has been accorded an Allowance Date and is being prepared for issuance. The application, however, is incomplete for the reasons below.

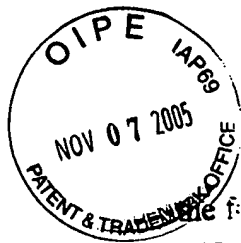
Applicant is given 30 days from the mail date of this Notice within ~~which to correct the informalities indicated below. A failure to~~ reply will result in the application being ABANDONED. This period for reply is NOT extendable under 37 CFR 1.136 (a) or (b).

- Specification---page 15 of the substitute specification is illegible.

APPLICANT MUST SUPPLY MISSING INFORMATION WITHIN 30 DAYS OF THE MAIL DATE OF THIS NOTICE.

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As shown in Fig. 15, an exemplary embodiment of the present invention proves the following benefits: When the process of the previous mode ends at S403, the MODEM 11 controls a status-transition and also the next mode is set at S404 by the instruction of selecting the next mode, thereby guaranteeing timing for the mode-switch resulting in efficient communication. Further, the MODEM 11 can monitor the timing instead of the facsimile controller 12, thereby reducing the load on the facsimile controller 12.

Various mode-switches by the MODEM are explained. MODEM 11 has several operational-modes and another operational mode which controls the several operational-modes. Facsimile sequence using the half-duplex V.34 Standard baseband (S431), Phase 2 (S432), Phase 3 (S433), the controlling channel (S435) are the modes in the sequence. The MODEM 11 is the V.34 Standard into which these modes are combined.

MODEM mode is set as the V.34 half-duplex mode. Before the operation is made so that the data is transmitted/received in Step S431 is determined. Phase 1 of Step S431 starts, where an adjustment is made so that the data can be transmitted/received in Step S431 is determined. Phase 2 of Step S432, the MODEM 11 transfers to Phase 2 of Step S432, where the MODEM 11 determines the line's characteristics and the symbol speed of the MODEM. At Phase 3 where equalizer-training (set a coefficient in or components) to the MODEM 11 is provided. After Phase S434 the control channel, where the data speed is determined. After Phase S434 the control channel, where the data speed is determined. Information of the T.30 Standard is exchanged.

When the control channel ends, the MODEM is at the control channel, where the image data of the facsimile is transferred. When the main channel ends, the MODEM enters Step S436 to determine what to do next. Based on an instruction from facsimile controller 12, the MODEM will either proceed to 1) Step S437, where the control channel resets the data-speed, or to Step S438, where the facsimile controller 12 gives this instruction to the MODEM 11 to determine the next step completing the main channel in Step S435.

Fig. 16 shows that the main channel having a flow-chart of a sequence on the ITU. Phase 1 (S434), and the main channel has the half-duplexed.

Before the operation is made so that the data is transmitted/received in Step S431 is determined. Phase 1 of Step S431 starts, where an adjustment is made so that the data can be transmitted/received in Step S431 is determined. Phase 2 of Step S432, the MODEM 11 transfers to Phase 2 of Step S432, where the MODEM 11 determines the line's characteristics and the symbol speed of the MODEM. At Phase 3 where equalizer-training (set a coefficient in or components) to the MODEM 11 is provided. After Phase S434 the control channel, where the data speed is determined. After Phase S434 the control channel, where the data speed is determined. Information of the T.30 Standard is exchanged.

When the control channel ends, the MODEM is at the control channel, where the image data of the facsimile is transferred. When the main channel ends, the MODEM enters Step S436 to determine what to do next. Based on an instruction from facsimile controller 12, the MODEM will either proceed to 1) Step S437, where the control channel resets the data-speed, or to Step S438, where the facsimile controller 12 gives this instruction to the MODEM 11 to determine the next step completing the main channel in Step S435.

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